

## **REMARKS**

By this amendment, claims 1-7 have been amended, and claims 8-11 have been added. Thus, claims 1-11 are now active in the application. Reexamination and reconsideration of the application are respectfully requested.

The specification and abstract have been carefully reviewed and revised to correct grammatical and idiomatic errors in order to aid the Examiner in further consideration of the application. The amendments to the specification and abstract are incorporated in the attached substitute specification and abstract. No new matter has been added.

Attached hereto is a marked-up version of the changes made to the specification and Abstract by the current amendment. The attachment is captioned "**Version with markings to show changes made.**"

In item 2 on page 2 of the Office Action, claims 1-7 were rejected under 35 U.S.C. § 102(b) as being anticipated by Eberle (US 4,225,037). This rejection is believed clearly inapplicable to the claims as now presented, for the following reasons.

With the exemplary reference to the drawing figures, claim 1 sets forth a chain-driving mechanism comprising: a plurality of sprockets 40 disposed in series; an endless chain 50 wound onto the plurality of sprockets 40 in order to transmit a driving force given to at least one (70) of the plurality of sprockets 40 to the remaining sprockets 40 and drive the remaining sprockets 40; and a chain guide 60 disposed adjacent to the chain 90 so as to sandwich the chain 90 from an outside of an outer periphery thereof; wherein the sprockets are arranged so as to satisfy the relation  $P \times N = 2L$ , where L is a pitch of the sprockets 40 and P is a pitch of the chain 50 (see Fig. 5A), and N is a condition establishment variable which is a multiple of 0.5 (as described at, for example, lines 12-17 of page 15 of the specification).

Independent claim 4 sets forth a conveyor apparatus comprising a plurality of carriers (e.g. rollers 20) arranged to convey objects to be conveyed, a driving mechanism that drives the carriers 20 in conjunction with each other, and a driving source (e.g. 80) that exerts a driving force onto the driving mechanism. Claim 4 further requires the driving mechanism to include all of the features as recited in claim 1.

Thus, as shown in Fig. 5A and described at, for example, page 15, lines 12-17, the sprockets 40 of the present invention are arranged with predetermined intervals (pitch L) taken in consideration of the elongation of the chain 50. In particular, the sprockets 40 are arranged such that the pitch L of the sprockets 40 (and thus of the shafts 30) is required to satisfy the relation  $P \times N = 2L$ , wherein P is the pitch of the chain 50 and N is a condition establishment variable which is a multiple of 0.5.

With the arrangement of the sprockets 40 set to satisfy the above relation while employing the chain guide 60 (61, 62), slack in the chain can be restricted, and the chain 50 can reliably be prevented from disengaging from the sprockets 40 without the need to perform adjustments.

Contrast to the present invention of claims 1 and 4, although the Eberle patent shows a conveyor apparatus which includes chain guide wear strips 430, 432, there is no disclosure or suggestion in the Eberle patent of the particular arrangement of sprockets as now recited in claims 1 and 4.


Thus, in view of this distinction between the Eberle conveyor and the present invention as now recited in claims 1 and 4, it is apparent that the present claims are not anticipated by the Eberle patent. Furthermore, the differences are such that a person of ordinary skill in the art would not have been motivated to modify the Eberle arrangement or to make any combination of the references of record in such a manner as to result in or otherwise render obvious the present invention of claims 1 and 4. Therefore, it is respectfully submitted that claims 1 and 4, as well as the claims depending therefrom, are clearly allowable over the prior art of record.

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice thereof is earnestly solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

Katsuyoshi TACHIBANA et al.

By:   
Charles R. Watts  
Registration No. 33,142  
Attorney for Applicants

CRW/mjw  
Washington, D.C. 20006-1021  
Telephone (202) 721-8200  
Facsimile (202) 721-8250  
April 26, 2007